



Apollon Array

by Arya Akhavan (February 2013)

Angles for R.I. = 1.540

51 + 10 girdles = 61 facets

5-fold, mirror-image symmetry

120 index

$L/W = 1.000$ $T/W = 0.199$ $U/W = 0.189$

$P/W = 0.437$ $C/W = 0.211$

$Vol./W^3 = 0.198$

PAVILION

P1	43.00°	003-021-027- 045-051-069- 075-093-099-117	Cut to centerpoint.
G1	90.00°	003-021-027- 045-051-069- 075-093-099-117	Set stone size.

CROWN

C1	42.25°	003-021-027- 045-051-069- 075-093-099-117	Set girdle width.
C2	34.87°	120-024-048- 072-096	Meet G1, C1
C3	29.64°	012-036-060- 084-108	Meet G1, C1
C4	27.11°	007-017-031- 041-055-065- 079-089-103-113	Meet C1, C2, C3
C5	19.60°	012-036-060- 084-108	Meet C3, C4
C6	14.76°	120-024-048- 072-096	Meet C2, C4
T	0.00°	Table	Meet C5, C6

What started as another attempt to include pentagons in my "Tessellation Party!" suite failed miserably, but instead turned into an absurdly bright design with a surprising royal shifton of scintillation. It's not too hard, either. Works in materials from petalite to rutile (RI = 1.50 - 2.62) with no changes, but I prefer pink tourmaline.
C:\Users\ARYADE~1\Pictures\Gems\DESIGN~1\WORKSI~1\Fixed\APOLLO~1.GEM